

While some of the higher mountain regions have a rather cool climate, there is never any frost, and in general it may be said that in the habitable region of the republic the temperature seldom exceeds 90° Fahrenheit or falls below 70°, and in any given locality the annual fluctuation is sometimes still less. The relative humidity is high in all of the uniformly high temperatures, excepting during the dry season on the west side of the isthmus.

Observations of wet and dry bulb thermometers were carried on at the station on the Rio Grande, at Las Lajas, Rio Viejo, Fort San Carlos, Sabalos, Rio San Carlos, Ochoa, Deseado, and at Greytown, and the results are given in the following tables.

Temperature and relative humidity at Las Lajas, on western shore of Lake Nicaragua, 1898.

Month.	Temperature.			Mean relative humidity.	Month.	Temperature.			Mean relative humidity.
	Maximum.	Minimum.	Mean.			Maximum.	Minimum.	Mean.	
February.....	80	75	77.7	81.1	August.....	85	74	80.7	87.0
March.....	82	75	79.5	79.3	September.....	85	73	79.4	90.4
April.....	82	73	80.8	79.1	October.....	85	73	79.8	89.7
May.....	91	73	82.1	83.0	November.....	85	73	78.3	91.1
June.....	91	73	81.4	84.8	December.....	85	73	78.3	91.1
July.....	88	74	79.7	86.6					

Temperature and relative humidity at station on Rio Viejo, at crossing of Matagalpa Leon road, 1898.

Month.	Temperature.			Mean relative humidity.	Month.	Temperature.			Mean relative humidity.
	Maximum.	Minimum.	Mean.			Maximum.	Minimum.	Mean.	
February.....	89	83	78.1	82.9	June.....	94	70	80.6	81.4
March.....	97	83	78.8	82.1	July.....	98	70	78.8	79.6
April.....	94	83	82.8	82.4	August.....	90	71	78.4	83.1
May.....	98	71	82.3	71.0					

Temperature and relative humidity at St. San Carlos, on eastern shore of Lake Nicaragua, 1898-99.

Month.	Temperature.			Mean relative humidity.	Month.	Temperature.			Mean relative humidity.
	Maximum.	Minimum.	Mean.			Maximum.	Minimum.	Mean.	
March, 1898.....	88	70	78.1	September.....	90	73	79.6	87.3
April.....	89	70	78.5	79.1	October.....	90	74	79.1	88.5
May.....	91	75	80.0	85.9	November.....	89	73	77.9	90.1
June.....	90	75	79.5	88.9	December.....	88	70	76.5	88.8
July.....	90	73	78.2	88.9	January, 1899.....	84	69	75.9	90.5
August.....	89	72	79.3	89.5					

Temperature and relative humidity at Camp Sabalos, on San Juan River ½ mile above Torro Rapids, 26 miles from Lake Nicaragua, 1898-99.

Month.	Temperature.			Mean relative humidity.	Month.	Temperature.			Mean relative humidity.
	Maximum.	Minimum.	Mean.			Maximum.	Minimum.	Mean.	
February, 1898.....	90	67	73.5	87.9	August.....	87	70	77.5	91.0
March.....	90	68	73.7	84.3	September.....	90	71	78.6	87.4
April.....	89	68	73.8	85.3	October.....	90	71	78.2	87.4
May.....	89	71	77.8	93.8	November.....	88	68	77.0	89.4
June.....	89	71	77.7	90.0	December.....	88	68	75.6	89.0
July.....	89	71	77.1	92.0	January, 1899.....	86	66	73.2	90.7

Temperature and relative humidity at Ochoa, on San Juan River, 40 miles from Caribbean Sea, 1898.

Month.	Temperature.			Mean relative humidity.	Month.	Temperature.			Mean relative humidity.
	Maximum.	Minimum.	Mean.			Maximum.	Minimum.	Mean.	
January.....	88	66	73.9	91.6	July.....	89	70	76.6	91.5
February.....	88	68	73.3	90.4	August.....	87	71	77.0	91.4
March.....	87	67	75.1	87.6	September.....	91	70	77.5	89.6
April.....	88	68	75.6	88.8	October.....	95	71	71.2	89.4
May.....	94	73	78.3	90.0	November.....	89	70	76.1	91.0
June.....	96	71	77.5	90.7	December.....	85	67	75.1	91.0

Temperature and relative humidity at station on Deseado River, 10 miles from Caribbean Sea, 1898.

Month.	Temperature.			Mean relative humidity.	Month.	Temperature.			Mean relative humidity.
	Maximum.	Minimum.	Mean.			Maximum.	Minimum.	Mean.	
January.....	86	65	74.1	94.7	July.....	85	73	78.1	89.2
February.....	84	66	74.1	90.2	August.....	87	73	78.3	91.8
March.....	87	68	77.2	84.7	September.....	91	73	79.8	88.8
April.....	87	67	78.6	85.2	October.....	89	72	79.5	88.8
May.....	91	73	79.5	89.4	November.....	98	71	76.8	84.8
June.....	86	73	78.9	91.0	December.....	84	66	76.1	94.0

Temperature and relative humidity at Greytown, Nicaragua, 1898.

Month.	Temperature.			Mean relative humidity.	Month.	Temperature.			Mean relative humidity.
	Maximum.	Minimum.	Mean.			Maximum.	Minimum.	Mean.	
January.....	86	67	77.5	82.5	July.....	90	74	80.0	91.3
February.....	84	71	77.1	81.7	August.....	96	73	80.0	84.9
March.....	90	69	78.4	80.2	September.....	96	73	81.2	85.0
April.....	89	69	79.9	79.0	October.....	96	73	81.4	84.8
May.....	94	73	80.4	82.1	November.....	92	72	79.7	87.7
June.....	90	73	79.8	91.4	December.....	91	72	78.3	88.0

NOTES BY THE EDITOR.

THE PACIFIC COAST DIVISION OF THE CANADIAN METEOROLOGICAL SERVICE.

Referring to an article by the Editor on page 102 of the MONTHLY WEATHER REVIEW for March, the reader will notice that we spoke only of the proposed system of daily forecasts that now emanate from the Central Office of this Division, at Victoria, B. C. But in addition to the forecasts, we are also interested in the general development of meteorological work

in that section. On this point Professor Stupart informs us that—

Since July, 1890, Mr. Baynes Reed has been in charge of the Canadian meteorological chief station on the Pacific coast. Last year his station was moved from the suburb of Esquimalt to the City of Victoria and became the head office of the Pacific Division of the Canadian service with Mr. Baynes Reed still in charge. Mr. F. Napier Denison, late of the Toronto office, has been assigned as his assistant. Mr. Reed has been indefatigable in his endeavors to secure volunteer observers in British Columbia, and to his labors, combined with the valued coop-

eration of the Provincial Department of Agriculture, is due the fact that the Pacific province has now a very large number of meteorological stations.

The immense territory covered by the Canadian Meteorological Service demands a correspondingly large number of voluntary and regular stations, in order to properly present its climatology in relation to agriculture, forestry, hygiene, and all human industries. A few such enterprising men as Mr. Baynes Reed, in charge of the respective divisions of the Canadian Service, would accomplish all that it is possible to do for the climatology and meteorology of the Dominion. Observers, clerks, computers, and forecasters, all alike feel the stimulating influence of an energetic chief.

Our readers will be interested in the short description of the general organization of the Canadian Service, published on a preceding page, from the pen of Prof. R. F. Stupart, who has been Director of the Canadian Service and Superintendent of the Magnetic Observatory at Toronto, since January, 1895, after a previous service of several years, first as assistant and then as acting director during the illness of his predecessor, Professor Carpmael, who died in October, 1894.

"SCIENTIFIC AIDS" IN THE DEPARTMENT OF AGRICULTURE.

Doubtless there are many observers in the Weather Bureau, both regular and voluntary, who have studied at agricultural colleges, experiment stations, or land grant colleges, and who will be interested in the following letter from the Honorable Secretary of Agriculture and the circular of the United States Civil Service Commission, which we publish in full.

In this letter our readers now have a statement from the highest authority as to the needs of the various bureaus of the Department of Agriculture, and will perceive the importance of the step that has been taken to educate men competent to give satisfactory service. The Department includes workers in every branch of biology and physics, and even mathematics; men who have to apply their knowledge to meteorology, the diseases of animals and plants, the cultivation of the ground, the manufacture of the completed product from the crude material, the irrigation of dry land, the construction of roads, the proper handling of statistics, and many other practical matters.

We can but believe that the Secretary has taken the very best possible way to secure able men and educate them to the special work of his broad service. It is a long step toward realizing that ideal "University of the United States," and the educational system to which we alluded on pp. 63, 64, 548, and 564 in the MONTHLY WEATHER REVIEWS for February and December, 1898.

(Copy P.)

UNITED STATES DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., June 10, 1899.

Hon. JOHN R. PROCTER,
President Civil Service Commission,
Washington, D. C.

DEAR SIR: In my report to the President of the work of this Department for the year ending June 30, 1898, I proposed that the Department should receive from time to time graduates of agricultural colleges, who should come to work in the scientific Divisions of the Department, and at the same time pursue post-graduate studies, thus taking advantage of the facilities which the Department has for advanced study and fitting themselves for posts of usefulness in the Department, agricultural colleges, experiment stations, and other institutions throughout the country requiring the services of persons able to make original researches in lines related to agriculture. This plan met with much approval from the officers of the agricultural colleges and experiment stations and others interested in the advancement of agricultural science and prac-

tice in this country, and I therefore wish to put it into actual operation as far as existing conditions in the Department will permit.

In order to have a permanent arrangement for the registration of graduates of colleges desiring to enter the service of the Department as scientific aids, and to furnish a proper basis for the selection of candidates best fitted to meet the needs of the Department for assistance in different lines of scientific work, I respectfully request the Commission to establish a register of "Scientific Aids" for this Department on the following basis:

1. That the candidates be limited to graduates of colleges receiving the benefits of grants of land or money from the United States.
2. That each candidate file with the Civil Service Commission a properly certified statement as to the length of time spent in college, the studies pursued, the standing in these studies, the special work it is desired to take up, and the special qualifications for such work, and finally a thesis upon such special scientific subject as the candidate may select, or in lieu of this any literature on scientific subjects published over his own signature.
3. That the weights for the aforesaid evidences of qualifications be arranged on the following basis: College course, with Bachelor's degree, 50; post-graduate course and special qualifications, 25; thesis or other literature, 25.
4. That the length of time any "Scientific Aid" may serve in the Department be limited to two years.
5. That the salary shall not exceed \$40 per month.
6. That an eligible register of "Scientific Aids, Department of Agriculture," be kept by the Commission and be open to inspection of the Department officers, as in the case of the list of "Assistants, Department of Agriculture."

I desire that this plan, when approved by the Commission, shall be put in operation without delay, and for this purpose request that you will send me 100 copies of such public notice as you send out regarding the establishment of this register, in order that I may transmit it to the presidents of the colleges concerned, with a statement of the needs and limits of the Department in the employment of their graduates in this way.

Very respectfully,
(Signed)

JAMES WILSON,
Secretary.

Series No. 1.
June, '99.

Sheet 1.

UNITED STATES CIVIL SERVICE COMMISSION.

DEPARTMENTAL SERVICE—SCIENTIFIC AID EXAMINATION.

DEPARTMENT OF AGRICULTURE.

Competitor must fill these blanks. { Name P. O. address
County State.....

(N. B.—The competitor will not write in the form below.)

REPORT OF MARKS.

WASHINGTON, D. C., ———, 189—.

Subjects.	Averages.	Relative weights.	Products of averages multiplied by weights.
First—College course with bachelor's degree..		10	
Second—Post-graduate course and special qualifications		5	
Third—Thesis or other literature.....		5	
Total.....		20	
General average			

Avoid all allusions to your political and religious opinions or affiliations in any material which is submitted with this sheet. Competitors will not be assembled for any of the tests.

PRELIMINARY QUESTION.

Give the names and addresses of five persons (not relatives) who have a personal knowledge of your educational and special qualifications and who will answer questions regarding them.

FIRST SUBJECT—COLLEGE COURSE WITH BACHELOR'S DEGREE.

Furnish a certified statement from the proper college or university officer relative to any diplomas or certificates of graduation you have received conferring scientific, literary, or other degrees, and stating fully the length of time spent in the college, the studies pursued and the standing in these studies.